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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			MENBERU, BENIYAM	
			ART UNIT	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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**Office Action Summary**

<b>Application No.</b> 10/663,804	<b>Applicant(s)</b> TOGAMI ET AL.	
<b>Examiner</b> BENIYAM MENBERU	<b>Art Unit</b> 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 28 May 2008.
- 2a)  This action is **FINAL**.
- 2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1,2,5-12,16-18,20,21,23 and 24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1,2,5-12,16-18,20,21,23,24 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All    b)  Some \*    c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1)  Notice of References Cited (PTO-892)
- 2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3)  Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5)  Notice of Informal Patent Application
- 6)  Other: \_\_\_\_\_.

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 28, 2008 has been entered.

***Response to Arguments***

2. Applicant's arguments, see Remarks, filed April 28, 2008, with respect to the rejection(s) of claim(s) 18 under U.S. Patent Application Publication No. US 2002/0051210 A1 to Ostromoukhov have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of U.S. Patent Application Publication No. US 2002/0097452 A1 to Nagarajan.

3. Applicant's arguments with respect to claims 1, 21, 23, and 24 have been considered but are moot in view of the new ground(s) of rejection.

4. Applicant's arguments filed April 28, 2008 have been fully considered but they are not persuasive. With respect to claim 16, Yamada '148 does disclose user providing instruction for background removal since in page 9, paragraph 112, user can provide

input on the location of noise area (background removal). When the user inputs the area location for noise removal, user is providing instruction to remove noise. Otherwise no noise area will be processed. Thus instead of facsimile device finding the area, the user is specifying the area for noise removal.

5. Applicant's arguments filed April 28, 2008 have been fully considered but they are not persuasive. With respect to claim 17, since there is no limitation that the image processing and background processing are separate, the rejection based on Horie is applicable. Further the sensing device as shown in Figure 5, is applicable to read on scanning unit. Further color/noise correction used for noise removal is separate from image processing unit 25 as shown in Figure 5.

### ***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1, 2, 6, 7, 20, 21, 23, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of U.S. Patent Application Publication No. US2001/0014227 A1 to Asakawa.

Regarding claim 1, Saito '974 discloses an image processing apparatus comprising:

a scanner unit that reads image data from a document (page 2, paragraph 40; scanner 2070);

a content determination unit that determines a type of image processing to be applied to the image data (page 2, paragraph 40, 43, 44, 45; type of compression 2040 is based on content (color/monochrome) of image data.);

an image processing unit that applies the image processing based on the type of image processing determined to be applied to the image data (page 3, paragraph 48-51; format processing based on content (color/monochrome));

a transmission unit that transmits the image processed image data to an external unit (Figure 3, reference 3008; page 2, paragraph 36; page 3, paragraph 52-54, 57-59; destination is the external unit). However Saito '974 does not disclose a color determination unit that performs color determination processing to determine whether the image data is color image data or monochrome image data

Mitsubori et al '002 discloses a color determination unit that performs color determination processing to determine whether the image data is color image data or monochrome image data (page 9, paragraph 146, 150, steps s907, no/yes).

Having the system of **Saito '974** and then given the well-established teaching of **Mitsubori et al '002**, it would have been obvious to one of ordinary skill in the art at the

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time of the invention was made to modify the system of **Saito '974** as taught by **Mitsubori et al '002**, since **Mitsubori et al '002** stated in page 3, paragraph 70, 71, such a modification would provide image type (color/monochrome) based transmission.

However Saito '974 does not disclose a scanner unit configured to perform background removal processing on the image data; an instruction reception unit that receives instruction information from a user on whether to perform background removal processing for the image data at the scanner unit; wherein, the content determination unit changes a type of image processing to be performed at the image processing unit based on the instruction information from the user.

Asakawa '227 discloses a scanner unit (page 2, paragraph 34, image reader 200) configured to perform background removal processing on the image data (page 7, paragraph 121, 122, 123; background removal by pressing key); an instruction reception unit that receives instruction information from a user on whether to perform background removal processing for the image data at the scanner unit (page 7, paragraph 121, 122; user can select background removal by the keys); wherein, the content determination unit changes a type of image processing to be performed at the image processing unit based on the instruction information from the user (page 8, paragraph 128; when background removal is selected shading operation 1213 and shading data operation 1223 are performed; Figure 14, in step s1310' when background removal is selected, then shading operation is performed in step s1311. The addition of shading operation is a change in type of image processing because of background removal.).

Having the system of **Saito '974** and then given the well-established teaching of **Asakawa '227**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Saito '974** as taught by **Asakawa '227**, since **Asakawa '227** stated in page 7, paragraph 121, such a modification would provide shading data needed for background removal.

Regarding claim 2, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. Further Mitsubori et al '002 discloses the image processing apparatus according to claim 1, wherein the content determination unit determines the content, based on a result of determination by the color determination unit (page 9, paragraph 150; depending on color/monochrome determination in step s907, image data is transferred to printer in step s908,s909 or internet transmission of web pages s911-s917).

Regarding claim 6, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 2. Further Saito '974 discloses the image processing apparatus according to claim 2, wherein the image processing includes compression processing, and the content determination unit determines content of the compression processing based on the result of the determination by the color determination unit (page 2, paragraph 43, 44).

Regarding claim 7, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. Further Saito '974 discloses the image processing apparatus according to claim 1, wherein the image processing

includes general format conversion to convert the image data into image data that is available in a general information processing apparatus (page 3, paragraph 50, 51, 58).

Regarding claim 20, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. Further Saito '974 discloses the image processing apparatus according to claim 1, further comprising an image forming unit that forms an image on a recording medium based on the image data after the image processing (page 2, paragraph 30, 31; reference 2095, 2090).

Regarding claim 21, Saito '974 discloses a method for image processing comprising:

reading image data from a document (page 2, paragraph 40; scanner 2070 reads image);

determining a type of image processing to be applied to the image data (page 2, paragraph 40, 43, 44, 45; type of compression 2040 is based on content (color/monochrome) of image data.);

applying the image processing based on the type of image processing determined to be applied to the image data (page 3, paragraph 48-51; format processing based on content (color/monochrome));

transmitting the image processed image data to an external unit (Figure 3, reference 3008; page 2, paragraph 36; page 3, paragraph 52-54, 57-59; destination is the external unit). However Saito '974 does not disclose determining whether the image data is color image data or monochrome image data;



Mitsubori et al '002 discloses a color determination unit that performs color determination processing to determine whether the image data is color image data or monochrome image data (page 9, paragraph 146, 150, steps s907, no/yes).

Having the system of Saito '974 and then given the well-established teaching of Mitsubori et al '002, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 as taught by Mitsubori et al '002, since Mitsubori et al '002 stated in page 3, paragraph 70, 71, such a modification would provide image type (color/monochrome) based transmission.

However Saito '974 does not disclose receiving instruction information from a user on whether to perform background removal processing for the image data at a scanner unit, wherein, the determining the type of image processing is based on the instruction information from the user.

Asakawa '227 discloses receiving instruction information from a user on whether to perform background removal processing for the image data at a scanner unit (page 2, paragraph 34, image reader 200; page 7, paragraph 121, 122; user can select background removal by using keys;), wherein, the determining the type of image processing is based on the instruction information from the user (page 8, paragraph 128; when background removal is selected shading operation 1213 and shading data operation 1223 are performed; Figure 14, in step s1310' when background removal is selected, then shading operation is performed in step s1311. The addition of shading operation is a change in type of image processing because of background removal.).

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Having the system of **Saito '974** and then given the well-established teaching of **Asakawa '227**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Saito '974** as taught by **Asakawa '227**, since **Asakawa '227** stated in page 7, paragraph 121, such a modification would provide shading data needed for background removal.

Regarding claim 23, see rejection of claim 22 as shown above. The method of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 render obvious the programming steps of claim 23.

Regarding claim 24, Saito '974 discloses an image processing system comprising:

an image processing apparatus, comprising

a scanner unit that reads image data from a document (page 2, paragraph 40; scanner 2070);

a content determination unit that determines a type of image processing to be applied to the image data (page 2, paragraph 40, 43, 44, 45; type of compression 2040 is based on content (color/monochrome) of image data.),

an image processing unit that applies the image processing based on the type of image processing determined to be applied to the image data (page 3, paragraph 48-51; format processing based on content (color/monochrome)),

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a transmission unit that transmits the image processed image data to an external unit (Figure 3, reference 3008; page 2, paragraph 36; page 3, paragraph 52-54, 57-59; destination is the external unit), and the external unit that receives the image processed image data from the transmission unit (page 3, paragraph 58; external units 1003/1004 receive formatted data.). However Saito '974 does not disclose a color determination unit that performs color determination processing to determine whether the image data is color image data or monochrome image data.

Mitsubori et al '002 discloses a color determination unit that performs color determination processing to determine whether the image data is color image data or monochrome image data (page 9, paragraph 146, 150, steps s907, no/yes).

Having the system of Saito '974 and then given the well-established teaching of Mitsubori et al '002, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 as taught by Mitsubori et al '002, since Mitsubori et al '002 stated in page 3, paragraph 70, 71, such a modification would provide image type (color/monochrome) based transmission.

However Saito '974 does not disclose a scanner unit configured to perform background removal processing on the image data, an instruction reception unit that receives instruction information from a user on whether to perform background removal processing for the image data at the scanner unit, wherein the content determination unit changes a type of image processing to be performed at the image processing unit based on the instruction information from the user.

Asakawa '227 discloses a scanner unit (page 2, paragraph 34, image reader 200) configured to perform background removal processing on the image data (page 7, paragraph 121, 122, 123; background removal by pressing key), an instruction reception unit that receives instruction information from a user on whether to perform background removal processing for the image data at the scanner unit (page 7, paragraph 121, 122; user can select background removal by the keys), wherein the content determination unit changes a type of image processing to be performed at the image processing unit based on the instruction information from the user (page 8, paragraph 128; when background removal is selected shading operation 1213 and shading data operation 1223 are performed; Figure 14, in step s1310' when background removal is selected, then shading operation is performed in step s1311. The addition of shading operation is a change in type of image processing because of background removal.).

Having the system of **Saito '974** and then given the well-established teaching of **Asakawa '227**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of **Saito '974** as taught by **Asakawa '227**, since **Asakawa '227** stated in page 7, paragraph 121, such a modification would provide shading data needed for background removal.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of

U.S. Patent Application Publication No. US2001/0014227 A1 to Asakawa further in view of U.S. Patent No. 6426809 to Hayashi et al.

Regarding claim 5, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 2. However Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 does not disclose the image processing apparatus according to claim 2, wherein when the color determination unit determines that the image data is monochrome image data, the content determination unit determines the content to be binarization of the image data.

Hayashi et al '809 disclose wherein when the color determination unit determines that the image data is monochrome image data, the content determination unit determines the content to be binarization of the image data (Figure 2, step s205, s211, s213; column 7, lines 56-67; column 8, lines 1-6).

Having the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 and then given the well-established teaching of **Hayashi et al '809**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 as taught by **Hayashi et al '809**, since **Hayashi et al '809** stated in col. 1, lines 63-67; column 2, lines 31-40, such a modification would provide color and monochrome image data transmission with quality and lower data amount respectively.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent

Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of U.S. Patent Application Publication No. US2001/0014227 A1 to Asakawa further in view of U.S. Patent No. 6449060 to Kawai et al.

Regarding claim 8, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. However Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 does not disclose the image processing apparatus according to claim: 1, wherein the image processing includes color conversion processing, and the content determination unit determines to perform the color conversion processing based on the result of the determination by the color determination unit.

Kawai et al '060 disclose wherein the image processing includes color conversion processing, and the content determination unit determines to perform the color conversion processing based on the result of the determination by the color determination unit (column 15, lines 26-49).

Having the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 and then given the well-established teaching of ***Kawai et al '060***, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 as taught by Kawai et al '060, since ***Kawai et al '060*** stated in col. 2, lines 42-51; column 15, lines 50-59, such a modification would provide a lower cost for image processing.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of U.S. Patent Application Publication No. US2001/0014227 A1 to Asakawa further in view of U.S. Patent No. 6449060 to Kawai et al further in view of U.S. Patent No. 6788339 to Ikeda.

Regarding claim 9, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 further in view of Kawai et al '060 teaches all the limitations of claim 8. However Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 further in view of Kawai et al '060 does not disclose the image processing apparatus according to claim 8, wherein the content determination unit changes a parameter for the color conversion processing for each image data.

Ikeda '339 discloses wherein the content determination unit changes a parameter for the color conversion processing for each image data (column 6, lines 8-21; column 17, lines 40-67; column 18, lines 1-5).

Having the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 further in view of Kawai et al '060 and then given the well-established teaching of **Ikeda '339**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 further in view of Kawai et al '060 as taught by **Ikeda '339**, since **Ikeda '339** stated in col. 17, lines 66-67; column 18, lines

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26-34, such a modification would provide color printing most appropriate to the color parameter.

11. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of U.S. Patent Application Publication No. US2001/0014227 A1 to Asakawa further in view of U.S. Patent No. 5446476 to Kouzaki.

Regarding claim 10, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. However Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 does not disclose the image processing apparatus according to claim 1, wherein the image processing includes gamma correction processing.

Kouzaki '476 discloses wherein the image processing includes gamma correction processing (column 5, lines 10-19; reference 89).

Having the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 and then given the well-established teaching of **Kouzaki '476**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 as taught by **Kouzaki '476**, since **Kouzaki '476** stated in col. 1, lines 45-



64, such a modification would provide appropriate image data processing for the location of the user through the modification of gamma processing (column 1, lines 45-64).

Regarding claim 11, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 further in view of Kouzaki '476 teaches all the limitations of claim 10. Further Kouzaki '476 disclose the image processing apparatus according to claim 10, wherein the content determination unit changes gamma correction data used for the gamma correction processing for each image data (column 7, lines 35-63).

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of U.S. Patent Application Publication No. US2001/0014227 A1 to Asakawa further in view of U.S. Patent Application Publication No. US 2003/0011815 A1 to Kita.

Regarding claim 12, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. However Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 does not disclose wherein the image processing includes halftone processing.

Kita '815 discloses wherein the image processing includes halftone processing (page 3, paragraph 75).

Having the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 and then given the well-established teaching of **Kita '815**, it would have

been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 as taught by **Kita '815**, since **Kita '815** stated in page 3, paragraph 75, 77, 78, page 4, paragraph 80; Figure 3, A-4,A-5, A-8, A-9, A-13, such a modification would provide selection of appropriate processing for image data before printing.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of U.S. Patent Application Publication No. US2001/0014227 A1 to Asakawa further in view of U.S. Patent Application Publication No. US 2004/0234148 A1 to Yamada.

Regarding claim 16, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. However Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 does not disclose wherein the image processing includes color space conversion, and the content determination unit changes a parameter for the color space conversion based on the instruction information.

Yamada '148 discloses wherein the image processing includes color space conversion (page 3, paragraph 27; color transformation), and the content determination unit changes a parameter for the color space conversion based on the instruction information (page 9, paragraph 112; user specifies instruction on where noise area is located; page 12, paragraph 144; coefficient for color transformation can be adjusted/changed for noise removal as user specifies area for noise).

Having the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 and then given the well-established teaching of **Yamada '148**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 as taught by **Yamada '148**, since **Yamada '148** stated in page 1, paragraph 1, such a modification would provide noise reduction in image processing.

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of U.S. Patent Application Publication No. US2001/0014227 A1 to Asakawa further in view of U.S. Patent No. 6480624 to Horie et al.

Regarding claim 17, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. However Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 does not disclose the image processing apparatus according to claim 1, wherein the image processing further includes gamma correction, and the content determination unit changes an input/output characteristic curve for the gamma correction based on the instruction information.

Horie et al '624 discloses wherein the image processing further includes gamma correction (column 10, lines 57-67; gamma correction), and the content determination unit changes an input/output characteristic curve for the gamma correction based on the

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instruction information (column 7, lines 3-15; noise correction instruction is used to determine whether color correction occurs; Figure 35 shows color correction instructions which include gamma correction step 122. In step 121, gamma characteristic is set (which reads on changing characteristic curve). column 23, lines 19-29).

Having the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 and then given the well-established teaching of *Horie et al '624*, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 as taught by *Horie et al '624*, since *Horie et al '624* stated in column 11, lines 37-28-35, such a modification would provide appropriate image for the background based on the gamma processing.

15. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US. 2002/0052974 A1 to Saito in view of U.S. Patent Application Publication No. US 2002/0114002 A1 to Mitsubori et al further in view of U.S. Patent Application Publication No. US 2002/0097452 A1 to Nagarajan.

Regarding claim 18, Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 teaches all the limitations of claim 1. However Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 does not disclose the image processing apparatus according to claim 1, wherein the image processing further includes halftone processing, and the content determination unit changes a type of halftone processing based on the instruction information.

Nagarajan '452 discloses wherein the image processing further includes halftone processing, and the content determination unit changes a type of halftone processing based on the instruction information (page 2, paragraph 14; scanner 20; page 3, paragraph 24; interface 40 provides settings to user for background suppression; page 3, paragraph 26; for background removal halftone rendering is selected. Four rendering types are allowed including diffusion and hybrid. ).

Having the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 and then given the well-established teaching of **Nagarajan '452**, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Saito '974 in view of Mitsubori et al '002 further in view of Asakawa '227 as taught by **Nagarajan '452**, since **Nagarajan '452** stated in page 1, paragraph 8; page 3, paragraph 27, such a modification would provide user with setting information for scanned image data.

### ***Other Prior Art Cited***

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent Application Publication No. US2002/0060819 A1 to Nara discloses scanning system.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENIYAM MENBERU whose telephone number is (571) 272-7465. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the customer service office whose telephone number is (571) 272-2600. The group receptionist number for TC 2600 is (571) 272-2600.

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For more information about the PAIR system, see <http://pair-direct.uspto.gov/>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

### ***Patent Examiner***

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